## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004546 Address: 333 Burma Road **Date Inspected:** 05-Nov-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Contractor: **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Weng Wen Bin N/A **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing island, China for the purpose of observing and monitoring the fabrication of the SAS Superstructure.

## Bay 7

The Quality Assurance Inspector observed a crew of 4 ZPMC Quality Control Inspectors performing ultrasonic testing on floor beam assemblies. The Quality Assurance Inspector observed the ZPMC Quality Control Inspectors were not performing an ultrasonic straight beam inspection prior to performing an angle beam inspection on the welds. The ZPMC Quality Control Inspectors' inspection on the floor beam assemblies was not in conformance with AWS D1.5 2002 section 6.19 Test Procedures paragraph 6.19.5. The Quality Assurance Inspector asked the ZPMC personnel performing the ultrasonic testing if they performed the straight beam inspection prior to performing the angle beam inspection. The ZPMC Quality Control Inspector informed the Quality Assurance Inspector they have performed the straight beam inspection. The Quality Assurance Inspector then asked to see the straight beam transducer used. The ZPMC Quality Control Inspector starting laughing because he did not have a straight beam transducer with him at the time of the inspection. The Quality Assurance Inspector asked the ZPMC Quality Control Inspector why did he would lie about having a straight beam transducer and the ZPMC Quality Control Inspector told the Quality Assurance Inspector he will get a straight beam transducer. The Quality Assurance Inspector informed the American Bridge/Flour Quality Assurance Inspector Weng Wen Bin about the ZPMC Quality Control Inspectors not following ultrasonic scanning procedures. Mr. Bin informed the Quality Assurance Inspector; he did not observe ZPMC Quality Control

## WELDING INSPECTION REPORT

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Inspector perform a straight beam inspectors prior to performing angle beam inspection. The ZPMC Quality Control Inspector returned with a straight beam transducer and asked the Quality Assurance Inspector if he was going to observe scanning with the straight beam transducer. The Quality Assurance Inspector informed the ZPMC Quality Control Inspector he will be observed and the ZPMC Quality Control Inspector informed the Quality Assurance Inspector this will be his second time performing a straight beam inspection on the part. The Quality Assurance Inspector asked the ZPMC Quality Control Inspector if that was true than why he had to leave the bay to get a straight beam transducer and why he was lying again about performing the inspection. The ZPMC Quality Control Inspector informed the Quality Assurance Inspector he did infact lie about doing the inspection and stated he will perform the straight beam inspection now. The Quality Assurance Inspector observed the ZPMC Quality Control Inspectors perform the straight beam inspection.

#### Ultrasonic Testing

The Quality Assurance Inspector performed 25% random ultrasonic testing on floor beams assemblies. The Quality Assurance Inspector performed ultrasonic testing on the following items; FB024-003-078, FB024-003-081, FB024-003-080, FB003-090, FB003-086, FB020-024-078, FB020-004-017, FB002-004-019, FB003-091, FB002-004-019, and FB003-064. See Caltrans report TL-6027 Ultrasonic Testing Report, dated Nov. 5, 2008 for additional information.

## **Summary of Conversations:**

See above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Peter Dautermann 150 0219 9593, who represents the Office of Structural Materials for your project.

Inspected By:	Lara,Raymond	Quality Assurance Inspector
Reviewed By:	Wright,Mark	QA Reviewer